

## IN THE CLAIMS

1. (Currently Amended) A graphic user interface method for defining a database query [definition and] output representation operation [parameters] parameter [of a database], comprising the steps of:

graphically representing [a query definition or] an output representation operation of a database operation on a [the] data set, said graphic representation having a graded representation portion;

receiving from the user a manipulation of the grade of the graded representation portion;  
[and]

translating the manipulation of the graded representation into a database [query definition or output representation] operation parameter [for the database]; and

receiving [the] an output database set from the database in accordance with the database [query definition of output representation] operation parameter, a relative arrangement of members of the output database set being responsive to manipulation of said graded representation portion by the user.

2. (Original) The method according to claim 1, wherein said data set comprises free form text.

3. (Currently Amended) The method according to claim 1, wherein said user inputs a database query comprising [database operation parameters comprise] Boolean search parameters.

4. (Original) The method according to claim 1, wherein said graphic representation comprises a bulls'-eye.
5. (Original) The method according to claim 1, wherein said graphic representation comprises a pyramid.
6. (Original) The method according to claim 1, wherein said manipulation comprises a gesture.
7. (Original) The method according to claim 1, wherein said manipulation comprises selecting a start position within the graded representation portion and subsequently displacing a graphic cursor with respect thereto.
8. (Currently Amended) The method according to claim 1, further comprising the step of receiving a [wherein said] database operation [parameters comprise] parameter comprising at least one numerical operator defining an expansiveness of a set inclusion property.
9. (Original) The method according to claim 1, wherein said database operation parameter comprises a statistical parameter.
10. (Original) The method according to claim 1, wherein said database operation parameter modifies a presentation of results of a Boolean search expression.

11. (Currently Amended) The method according to claim 1, further comprising the step of receiving a [wherein said] database operation parameter through manipulation of a graded representation portion, which modifies a set inclusion property of a Boolean search expression.

12. (Currently Amended) The method according to claim 1, further comprising the step of receiving a [wherein said] database operation parameter through manipulation of a graded representation portion, which modifies [comprises] a non-Boolean search parameter of the database.

13. (Original) The method according to claim 1, wherein the user manipulation comprises a gesture for affecting a relative size, shape or position of the graded representation portion.

14. (Original) The method according to claim 1, wherein the database operation parameter comprises an output ranking.

15. (Currently Amended) The method according to claim 1, further comprising the steps of receiving a further database operation parameter from the user through manipulation of a graded representation portion, the database operation parameter and further database operation parameter being selected from one or more of the group consisting of a set inclusion property and a set ranking property, which together determine and arrange the output set.

16. (Currently Amended) The method according to claim 1, wherein a set inclusion criterion of the output database set [resulting from evaluation of the database operation parameter] is based on an intrinsic characteristic of the elements of the database, and a ranking of members included [elements] in [an] the output set is based on a characteristic extrinsic to the [elements] members of the output set [database].

17. (Currently Amended) The method according to claim 1, further comprising the steps of:

receiving [evaluating the] an database operation parameter to [produce an] define the output set;

representing the output database set as a second graphic representation having a graded representation portion;

receiving from the user a manipulation of [a graded of] the graded representation portion of the second graphic representation; and

translating the manipulation of the graded representation of the second graphic representation into a second database operation parameter for operation on the output set.

18. (Original) The method according to claim 1, wherein said graphically representing step is adaptive to a style of the user.

19. (Original) The method according to claim 1, further comprising the step of altering the functioning of the graphic user interface based on preferences of the user, the preference being derived from monitoring the past activities of the user.

20. (Original) The method according to claim 1, further comprising the step of transmitting the database operation parameter through a computer network to a remote database server.

21. (Currently Amended) The method according to claim 1, wherein:  
said graded representation portion comprises at least one graphic control having a [liner] linear depiction; and  
said manipulation comprises a movement of a graphic element along the [liner] linear depiction.

22. (Currently Amended) The method according to claim 1, wherein:  
said graded representation portion comprises a plurality of graphic controls, arranged in an array and each having a [liner] linear depiction; and  
said manipulation comprises a movement of a graphic element along the [liner] linear depictions.

23. (Currently Amended) The method according to claim 1, wherein the database [contains] membership comprises a set of referential data records, each having an identifier, and content information, [relating to the content of the database and identifiers of a subset of] at least a portion of said set of referential data records being referenced by other data records [the referential data records], further comprising the [steps] step of sorting identifiers of the [subset] data records included as members of the output set based on a primary search criterion and an

analysis of a relation of references of the database.

24. (Newly Added) A computer readable medium having therein computer instructions for controlling a computer to perform the method of claim 1.

25. (Newly Added) A method for using a graphic user interface, comprising the steps of:

receiving from the user, through a graphic user interface, a quantitative graphic representation of an output arrangement criterion;

transmitting electronic data representing the quantitative graphic representation to an automated query response system; and

receiving a response from the automated query response system, comprising a plurality of items arranged relative to each other in dependence on the output arrangement criterion.

26. (Newly Added) The method according to claim 25, wherein the quantitative graphic representation comprises a scale, wherein a user selects a desired quantitative value based on a manipulation of the scale.

27. (Newly Added) The method according to claim 25, wherein the automated query response system comprises a search engine.

28. (Newly Added) The method according to claim 25, wherein the electronic data is transmitted over the Internet.

29. (Newly Added) The method according to claim 25, wherein the output criterion comprises a sort criterion.

30. (Newly Added) The method according to claim 25, wherein the output criterion comprises a ranking criterion.

31. (Newly Added) The method according to claim 25, wherein the quantitative graphic representation comprises both an output arrangement criterion and a quantitative modifier for a semantic query.

32. (Newly Added) The method according to claim 25, wherein the automated query response system operates on data records comprising records having links to other data records or records which are linked to by other data records, a ranking of data records represented in the response being dependent on the links to or from other data records.

33. (Newly Added) A computer readable medium having therein computer instructions for controlling a computer to perform the method of claim 25.

34. (Newly Added) A method comprising:  
receiving a restrictive criterion to define a subset within a set;  
inferring a ranking of members of the subset in dependence on a number of links to that member by other members of the set; and

outputting members of the subset in order of ranking.

35. (Newly Added) The method according to claim 34, wherein said ranking is dependent on an importance of a set member citing a member within the defined subset.

36. (Newly Added) The method according to claim 34, wherein said ranking is dependent on a statistical analysis of citations within the set.

37. (Newly Added) A computer readable medium having therein computer instructions for controlling a computer to perform the method of claim 34.

38. (Newly Added) A method comprising:  
transmitting a restrictive criterion from a user to a database search engine;  
automatically analyzing the data records of the database based on the restrictive criterion  
and a blockmodelling of at least a portion of records within the database; and  
transmitting set of responsive records ranked according to said automatic analysis to the user.

39. (Newly Added) A method comprising:  
transmitting a content-based restrictive criterion from a user to a database search engine;  
automatically analyzing the database based on the restrictive criterion and a content  
independent importance criterion; and  
transmitting the subset of records meeting the restrictive criterion to the user ranked in  
accordance with the importance criterion.



40. (Newly Added) A graphic user interface method for defining database query definition and output representation operation parameters of a database, comprising the steps of:

graphically representing an output representation operation on the data set, said graphic representation having a graded representation portion;

receiving from the user a manipulation of the grade of graded representation portion; and

translating the manipulation of the graded representation into a database output representation operation parameter for the database; and

receiving the output database set in accordance with the output representation operation parameter.

41. (Newly Added) The graphic user interface method according to claim 40, wherein:

plurality of graphical representations of the output representation operation on the data set are provided;

said manipulation receiving step receives from the user a manipulation of the grade of a plurality of graded representation portions; and

said translating step translates the manipulation of the graded representations into a plurality of database output representation operation parameters for the database; and

said output receiving step receives the output database set in accordance with the output representation operation parameters, and

an arrangement of members of the output set is dependent on said plurality of database output representation operation parameters.